

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended in light of the following discussion, is respectfully requested.

Claims 1-3, 6-8, 11, 13, 15-17, 20-22, 25, 27, 29 and 30 are pending in this application. Claims 1, 6, 11, 15, 20, 25, 29 and 30 are amended by the present amendment. Support for the amended claims can be found in the original specification, claims and drawings.¹ No new matter is presented.

In the Office Action, Claims 1-3, 6-8, 11, 13, 15-18, 20-23, 25, 27 and 29 are rejected under 35 U.S.C. § 103(a) as unpatentable over Wang et al ("Policy-Enabled Handoffs Across Heterogeneous Wireless Networks", herein Wang) in view of Ashwood Smith (U.S. Pat. 7,296,087).

In response to the above noted rejection under 35 U.S.C. § 103, Applicants respectfully submit that amended independent Claims 1, 6, 11, 15, 20, 25, 29 and 30 recite novel features clearly not taught or rendered obvious by the applied references.

Amended independent Claim 30, for example, recites, in part, a link manager comprising:

...a processor configured to define a plurality of link metrics, each link metric being defined by a plurality of characteristics of each detected link;
an interface configured to receive an input to rank said respective link metrics and receive an input to rank each of said plurality of characteristics defining each of said respective link metrics; and
a processor configured to select a link by *comparing each individual stored metric corresponding to each link in order of rank by individually comparing each of said plurality of characteristics defining each of said respective link metrics in the order assigned by the data rank assigning means*, and select a link corresponding to a record having a characteristic with a highest rank thus assigned, at a link metric with a highest rank.

¹ e.g., specification, Figs. 7-8 and pp. 16-18.

Independent Claims 1, 6, 11, 15, 20, 25 and 29, while directed to alternative embodiments, are amended to recite similar features. Accordingly, the arguments presented below are applicable to each of independent Claims 1, 6, 11, 15, 20, 25, 29 and 30.

As disclosed in an exemplary embodiment at Figs. 7-8 and pp. 16-18 of the specification, the processor selects a link by comparing the link metrics (e.g., cost, link type, speed, etc.) in order of rank by comparing each of the characteristics (e.g., free, flat rate, usage-based, etc.) in each of the link metrics individually. In other words, the link metric with the highest rank (e.g., cost) is selected for comparison. Then, for the selected highest ranked link metric, the characteristics within the cost metric (e.g., free, flat rate, usage-based, etc.) are individually compared between each of the individual links based on their ranking. The analysis ends when one of the links distinguishes itself as having a characteristic with a highest rank thus assigned, at a link metric with a highest rank.

Such a configuration simplifies the process of selecting a link by analyzing the metrics, and characteristics within each of the metrics, individually and stopping when one link distinguishes itself. Therefore, it is unnecessary to perform calculations and assign “costs” to various link metrics in order to select a link that is most desirable to a user.

In rejecting Claim 30, p. 13 of the Office Action concedes that “[w]hile Wang teaches determining link metrics (such as length of route and cost), ranking the metrics (through the use of weights), and shows that link metrics are represented by various characteristics... Wang however does not explicitly state that each link metric is represented by a plurality of characteristics.” In an attempt to remedy this deficiency, the Office Action relies on Ashwood Smith and asserts that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the cited references to arrive at Applicants claims. In response to this rejection, Applicants respectfully submit that Wang, even if combined with Ashwood Smith, fails to teach or suggest “select[ing] a link by *comparing each individual*

stored metric corresponding to each link in order of rank by individually comparing each of said plurality of characteristics defining each of said respective link metrics in the order assigned by the data rank assigning means, and select[ing] a link corresponding to a record having a characteristic with a highest rank thus assigned, at a link metric with a highest rank”, as recited in independent Claim 30.

Turning to the applied references, Wang describes a system to enable handoffs between a plurality of links provided to a mobile station. Wang, at p. 55, col. 2, ll. 29-35, describes that users may specify the importance or weights of each normalized parameter corresponding to characteristics of a specific link. These weights are then combined in a simultaneous calculation to determine a “cost function” or similar cumulative parameter corresponding to a specified network in order to determine the best available link.

Ashwood Smith describes assigning a metric (e.g., link distance vector, or a link cost factor) to each link, which is used within each of a plurality of routers for mapping packet destination addresses to downstream links.² Ashwood Smith further describes that his metric is provisioned for traffic engineering, and reflects both geographic distances and provisioned bandwidth for each link. Ashwood Smith, therefore, also appears to describe the use of a single “metric” that is a normalized value reflecting a plurality of parameters.

As described at p. 55, col. 2, ll. 17-28 of Wang, each of a plurality of link metrics (e.g., bandwidth, access, cost) are normalized and weighted by a user to arrive at an overall “cost” of each link. This “cost” is the parameter used to determine which link will subsequently be selected. This process appears to be similar to the process in Ashwood Smith that determines a single “metric” to determine how a packet should be routed. Therefore, even if each of the link metrics (e.g., bandwidth, access, cost) in Wang were to be represented by a plurality of characteristics, as asserted in the Office Action, these

² Ashwood Smith at col. 1, ll. 51-54.

characteristics would be included in the cost calculation as one of the overall parameters representing a link metric, and the link would still be selected on the basis of the overall “cost” of each link.

Moreover, even if the weighting of various parameters in Wang were to be considered analogous to ranking parameters, Wang fails to disclose the process of individually comparing each characteristic within each of the parameters in an assigned order of rank, as claimed.

Thus, Wang, even if combined with Ashwood Smith fails to teach or suggest “select[ing] a link by *comparing each individual stored metric corresponding to each link in order of rank by individually comparing each of said plurality of characteristics defining each of said respective link metrics in the order assigned by the data rank assigning means*”, as recited in independent Claim 30.

Accordingly, Applicants respectfully submit that new independent Claim 30 patentably defines over Wang and Ashwood Smith. For substantially similar reasons, it is also submitted that independent Claims 1 6, 11, 15, 20, 25 and 29 also patentably define over Wang and Ashwood Smith, and Applicants respectfully request that the rejection of these claims (and the claims that depend therefrom) under 35 U.S.C. §103 be withdrawn.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 1-3, 6-8, 11, 13, 15-17, 20-22, 25, 27, 29 and 30 is patentably distinguishing over the applied references. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of the application is therefore requested.

Respectfully submitted,

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